$$\begin{array}{c|c}\daleth & \blacktriangleright \\ \hline \varphi\blacktriangleright & \daleth\end{array}\;\begin{array}{c|c}\bar{\daleth} & \bar{\blacktriangleright} \\ \hline \varphi\bar{\blacktriangleright} & \bar{\daleth}\end{array} = \begin{array}{c|c}\daleth\bar{\daleth}+\varphi\blacktriangleright\bar{\blacktriangleright} & \daleth\bar{\blacktriangleright}+\blacktriangleright\bar{\daleth} \\ \hline \varphi\left(\daleth\bar{\blacktriangleright}+\blacktriangleright\bar{\daleth}\right) & \daleth\bar{\daleth}+\varphi\blacktriangleright\bar{\blacktriangleright}\end{array}$$

$${}^{X}f \in K|X$$

$${}^{X}\daleth|{}^{X}\blacktriangleright \in K\left(X\right)$$

$${}^{X}K_{f} \ni \daleth|\blacktriangleright$$

$$\underbrace{\daleth|\blacktriangleright}\underset{\varphi}{\cdot}\underbrace{\bar{\daleth}|\bar{\blacktriangleright}} = \overbrace{\daleth\bar{\daleth}+\blacktriangleright\varphi\bar{\blacktriangleright}}|\overbrace{\daleth\bar{\blacktriangleright}+\blacktriangleright\bar{\daleth}}$$

$$\overbrace{\underbrace{\daleth|\blacktriangleright}\underset{\varphi}{\cdot}\underbrace{\bar{\daleth}|\bar{\blacktriangleright}}}\underset{\varphi}{\cdot}\underbrace{\bar{\bar{\daleth}}|\bar{\bar{\blacktriangleright}}} = \underbrace{\daleth|\blacktriangleright}\underset{\varphi}{\cdot}\overbrace{\underbrace{\bar{\daleth}|\bar{\blacktriangleright}}\underset{\varphi}{\cdot}\underbrace{\bar{\bar{\daleth}}|\bar{\bar{\blacktriangleright}}}}$$

$$\text{LHS} = \underbrace{\overbrace{\daleth\bar{\daleth}+\blacktriangleright\varphi\bar{\blacktriangleright}}|\overbrace{\daleth\bar{\blacktriangleright}+\blacktriangleright\bar{\daleth}}}\underset{\varphi}{\cdot}\underbrace{\bar{\bar{\daleth}}|\bar{\bar{\blacktriangleright}}} = \underbrace{\overbrace{\daleth\bar{\daleth}+\blacktriangleright\varphi\bar{\blacktriangleright}}\bar{\bar{\daleth}}+\overbrace{\daleth\bar{\blacktriangleright}+\blacktriangleright\bar{\daleth}}\varphi\bar{\bar{\blacktriangleright}}}|\underbrace{\overbrace{\daleth\bar{\daleth}+\blacktriangleright\varphi\bar{\blacktriangleright}}\bar{\bar{\blacktriangleright}}+\overbrace{\daleth\bar{\blacktriangleright}+\blacktriangleright\bar{\daleth}}\bar{\bar{\daleth}}}$$

$$= \underbrace{\daleth\bar{\daleth}\bar{\bar{\daleth}}+\blacktriangleright\varphi\bar{\blacktriangleright}\bar{\bar{\daleth}}+\daleth\bar{\blacktriangleright}\varphi\bar{\bar{\blacktriangleright}}+\blacktriangleright\bar{\daleth}\varphi\bar{\bar{\blacktriangleright}}}|\underbrace{\daleth\bar{\daleth}\bar{\bar{\blacktriangleright}}+\blacktriangleright\varphi\bar{\blacktriangleright}\bar{\bar{\blacktriangleright}}+\daleth\bar{\blacktriangleright}\bar{\bar{\daleth}}+\blacktriangleright\bar{\daleth}\bar{\bar{\daleth}}}$$

$$= \underbrace{\daleth\bar{\daleth}\bar{\bar{\daleth}}+\daleth\bar{\blacktriangleright}\varphi\bar{\bar{\blacktriangleright}}+\blacktriangleright\varphi\bar{\daleth}\bar{\bar{\blacktriangleright}}+\blacktriangleright\varphi\bar{\blacktriangleright}\bar{\bar{\daleth}}}|\underbrace{\daleth\bar{\daleth}\bar{\bar{\blacktriangleright}}+\daleth\bar{\blacktriangleright}\bar{\bar{\daleth}}+\blacktriangleright\bar{\daleth}\bar{\bar{\daleth}}+\blacktriangleright\bar{\blacktriangleright}\varphi\bar{\bar{\blacktriangleright}}}$$

$$= \underbrace{\daleth\overbrace{\bar{\daleth}\bar{\bar{\daleth}}+\bar{\blacktriangleright}\varphi\bar{\bar{\blacktriangleright}}}+\blacktriangleright f\overbrace{\bar{\daleth}\bar{\bar{\blacktriangleright}}+\bar{\blacktriangleright}\bar{\bar{\daleth}}}}|\underbrace{\daleth\overbrace{\bar{\daleth}\bar{\bar{\blacktriangleright}}+\bar{\blacktriangleright}\bar{\bar{\daleth}}}+\blacktriangleright\overbrace{\bar{\daleth}\bar{\bar{\daleth}}+\bar{\blacktriangleright}\varphi\bar{\bar{\blacktriangleright}}}} = \underbrace{\daleth|\blacktriangleright}\underset{\varphi}{\cdot}\underbrace{\overbrace{\bar{\daleth}\bar{\bar{\daleth}}+\bar{\blacktriangleright}\varphi\bar{\bar{\blacktriangleright}}}|\overbrace{\bar{\daleth}\bar{\bar{\blacktriangleright}}+\bar{\blacktriangleright}\bar{\bar{\daleth}}}} = \text{RHS}$$

$$\underbrace{\daleth|\blacktriangleright}\underset{\varphi}{\cdot}\underbrace{1|0} = \daleth|\blacktriangleright$$

$$\begin{array}{c|c}\daleth & \blacktriangleright \\ \hline \varphi\blacktriangleright & \daleth\end{array}\;\begin{array}{c|c}1 & 0 \\ \hline \varphi 0 & 1\end{array} = \begin{array}{c|c}\daleth & \blacktriangleright \\ \hline \varphi\blacktriangleright & \daleth\end{array}$$

$$\text{LHS} = \underbrace{\daleth 1+\blacktriangleright\varphi 0}|\underbrace{\daleth 0+\blacktriangleright 1} = \text{RHS}$$

$$\daleth^{2} \neq \blacktriangleright^{2}\varphi \Longrightarrow \underbrace{\daleth|\blacktriangleright}^{-1} = \frac{\daleth}{\daleth^{2}-\blacktriangleright^{2}\varphi}|\frac{-\blacktriangleright}{\daleth^{2}-\blacktriangleright^{2}\varphi}$$

$$\begin{array}{c|c}\daleth & \blacktriangleright \\ \hline \varphi\blacktriangleright & \daleth\end{array}\;\begin{array}{c|c}\daleth & -\blacktriangleright \\ \hline -\varphi\blacktriangleright & \daleth\end{array} = \underbrace{\daleth^{2}-\varphi\blacktriangleright^{2}}_{\neq 0}\begin{array}{c|c}1 & 0 \\ \hline \varphi 0 & 1\end{array}$$

$$\underbrace{\daleth|\blacktriangleright}\underset{\varphi}{\cdot}\underbrace{\daleth|-\blacktriangleright} = \underbrace{\daleth^{2}-\blacktriangleright^{2}\varphi}|0 \Longrightarrow \underbrace{\daleth|\blacktriangleright}\underset{\varphi}{\cdot}\underbrace{\frac{\daleth}{\daleth^{2}-\blacktriangleright^{2}\varphi}|\frac{-\blacktriangleright}{\daleth^{2}-\blacktriangleright^{2}\varphi}} = 1|0$$

$$ {}^{x}\gamma \;=1|x\begin{array}{c|c} a & b \\ \hline c & d \end{array}=\frac{b+xd}{a+xc} $$

$$ \sharp A=2m: \quad {}^{x}\varphi \;=\prod_{\alpha}^{A}(x-\alpha): \quad {}^{u}\psi \;=\prod_{\alpha}^{A}(u-{}^{\alpha}\gamma): \quad \lambda=\frac{\overbrace{da-cb}^{2m}}{\prod_{\alpha}^{A} a+\alpha c} $$

$$ {}^{x}K_{\lambda\varphi} \xleftarrow{M_{a+xc}^{-m}} {}^{x}K_{\gamma \ltimes \psi} \xleftarrow{C_{\gamma}} {}^{u}K_{\psi} $$

$$ {}^{x}K_{\lambda\varphi} \xleftarrow{M_{a+xc}^{-m} C_{\gamma}} {}^{u}K_{\psi} $$

$$ {}^{x\gamma}\rceil\,|\frac{{}^{x\gamma}\boldsymbol{\rceil}}{(a+xc)^{m}} \longleftarrow\!\shortmid\; {}^{x\gamma}\rceil\,|\,{}^{x\gamma}\boldsymbol{\rceil} \longleftarrow\!\shortmid\; {}^{u}\rceil\,|\,{}^{u}\boldsymbol{\rceil} $$

$$ {}^{x}\gamma \;-\; {}^{y}\gamma \;=\frac{b+xd}{a+xc}-\frac{b+yd}{a+yc}=\frac{(b+xd)(a+yc)-(a+xc)(b+yd)}{(a+xc)(a+yc)}=(x-y)\,\frac{da-cb}{(a+xc)(a+yc)} $$

$$ {}^{x}\gamma \;-\; {}^{\alpha}\gamma \;=(x-\alpha)\,\frac{da-cb}{(a+xc)(a+\alpha c)} $$

$$ {}^{x\gamma}\psi\,(a+xc)^{2m} \;=\; (a+xc)^{2m}\; {}^{x}\overbrace{\gamma \ltimes \psi} \;=\; (a+xc)^{2m}\prod_{\alpha}^{A}({}^{x}\gamma-{}^{\alpha}\gamma) $$

$$ =\;(a+xc)^{2m}\prod_{\alpha}^{A}(x-\alpha)\,\frac{da-cb}{(a+xc)(a+\alpha c)} \;=\; {}^{x}\varphi\prod_{\alpha}^{A}\frac{da-cb}{a+\alpha c}=\lambda\,{}^{x}\varphi $$